CLAIMS

WE CLAIM:

1. A method of transmitting a communication signal between a radio base station and a radiation element, the method comprising:

receiving an input signal;

extracting a data signal from the input signal that includes values representing operating parameters of devices at the radiation element; and

producing a status signal for each device that simulates a feedback signal for the device.

2. A method as defined in Claim 1, wherein the input signal comprises a plurality of communication signals.

3. A method as defined in Claim 1, wherein the devices include system cables.

4. A method as defined in Claim 1, wherein the devices include a mast head amplifier.

5. A method of transmitting a communication signal between a radio base station and a radiation element, the method comprising:

receiving a plurality of communication signals;

combining the plurality of communication signals with a data signal; and

transmitting the combined plurality of communication signals and the data signal.

6. A method as defined in Claim 5, wherein the plurality of communication signals are received from a radio base station.

7. A method as defined in Claim 5, wherein the combined signals are transmitted to a radiation element.

8. A method of transmitting a communication signal between a radio base station and a radiation element, the method comprising:

receiving an input signal;

extracting a data signal from the input signal that includes values representing operating parameters setting for devices at the radiation element; and

producing an output signal for each device that transfers the operating parameter setting to the device.

9. A method as defined in Claim 8, wherein the input signal comprises a plurality of communication signals.

10. A method as defined in Claim 8, wherein the devices include a mast head amplifier.

11. A method of transmitting a communication signal between a radio base station and a radiation element, the method comprising:

receiving a plurality of communication signals;

producing a data signal comprising values representing operating parameters for a plurality of devices at the radiation element;

combining the plurality of communication signals with the data signal; and

transmitting the combined plurality of communication signals and the data signal.

12. A method as defined in Claim 11, wherein the plurality of communication signals are received from a plurality of devices at the radiation element.

13. A method as defined in Claim 12, wherein the devices include mast head amplifiers.

14. A method as defined in Claim 11, wherein the combined signals are transmitted to a radio base station.

15. An apparatus for transmitting a communication signal between a radio base station and a radiation element, the apparatus comprising:

a bias tee configured to receive an input signal;

a controller configured to extract a data signal from the input signal that includes values representing operating parameters of devices at the radiation element and to produce a status signal for each device; and

a load simulator that simulates a feedback signal for the device.

16. An apparatus for transmitting a communication signal between a radio base station and a radiation element, the apparatus comprising:

a receiver configured to receive a plurality of communication signals;

a combiner configured to combine the plurality of communication signals with a data signal; and

a transmitter configured to transmit the combined plurality of communication signals and the data signal.

17. An apparatus for transmitting a communication signal between a radio base station and a radiation element, the apparatus comprising:

a bias tee configured to receive an input signal; and

a controller configured to extract a data signal from the input signal that includes values representing operating parameters setting for devices at the radiation element and to produce an output signal for each device that transfers the operating parameter setting to the device.

18. An apparatus for transmitting a communication signal between a radio base station and a radiation element, the apparatus comprising:

a receiver configured to receive a plurality of communication signals;

a controller configured to produce a data signal comprising values representing operating parameters for a plurality of devices at the radiation element;

a combiner configured to combine the plurality of communication signals with the data signal; and

a transmitter configured to transmit the combined plurality of communication signals and the data signal.